Subject: glowbugs V1 #209

glowbugs Monday, December 22 1997 Volume 01 : Number 209

Date: Fri, 19 Dec 1997 04:40:21 +0000
From: Sandy W5TVW <ebjr@worldnet.att.net>

Subject: RE: AES "sale sheet"

Anyone comtemplating building a junk box transmitter, now is the time to get the tubes.

"AC-DC" push-pull oscillator tubes:17GV5, 21JV6, 21KQ6, all at 50 cents each. 15CW5 (nice oscillator driver) at 50 cents each. For some POWER or a linear amplifier 31LZ6 (30 watt plate dissipation jugs) at \$2.50 each.

I'm kinda thinking about using a 21KA6 as an oscillator to drive maybe two 31LZ6's in parallel and trying to develop over 100 watts output from a line-operated voltage doubling power supply. Small, light, no transformers.

73,
E. V. Sandy Blaize, W5TVW
"Boat Anchors collected, restored, repaired, traded and used!"
417 Ridgewood Drive
Metairie, LA., 70001

860 Hartley 'ECO' under construction*

*** Looking for a TRC-10 transceiver *****

*** Looking for an RAL receiver ********

Date: Fri, 19 Dec 1997 13:08:52 -0600

From: "Freeberg, Scott (STP)" <scott.freeberg@guidant.com>
Subject: Conard, did it work? TEST, DO NOT READ

Conard, I tried duplicating your Outlook settings. Did I get rid of the attachment?

73, Scott WA9WFA Saint Paul Minn

Date: Fri, 19 Dec 1997 15:54:06 -0500

From: Roy Morgan <morgan@speckle.ncsl.nist.gov>
Subject: Re: Hartley or TNT Tube Candidate?

At 12:10 PM 12/17/97 -0500, rdkeys@csemail.cropsci.ncsu.edu wrote:

>> I have acquired several NOS JAN 6080WB tubes.

 $\cdot \cdot \cdot$ There is a 6583 or something like that that is an equivalent >to the 6336, but with a different mu,

Here is some info about these tubes:

Type Filament Pd MAX Ep MAX Ip Mu (values for ONE section: per plate)

6AS7 6.3v @ 2.5a 14 w 275 v 125 ma 1.4 to 2.6

6080 6.3v @ 2.5a 13 w 250 v 125 ma 2

6080WA (same as for 6080)

6082 26.5 v 0.6 a filament, otherwise same as 6080

5998 6.3v @ 2.4a 250 v 125 ma

6336A 6.3v @ 5amps 30 w 400 v 400 ma 2.7

6394A 26.5v@ 1.3 a 30 w 400 v 400 ma 2.7

6528 (same envelope and graphite plate structure as the 6336 and 6394)

Notes: 1) I do not have much data on the 5998, and none on the 6528, but I suspect that the 5998 is the higher mu version of the 6AS7/6080, and that the 6528 is the corresponding higher-mu version of the 6336A. I do have one or two examples of each of the 5998 and 6528, but have not tested them.

2) An RCA publication I have says about the 6080: "Low MU Twin Triode. Similar to the 6AS7-G, but smaller in size. Intended for applications crticial as to shock and vibration, and requiring reduced suscetibility to electrolysis. Octal 8-pin base."

I assume that "electrolysis" means cathode interface or degradation in the cathode structure caused by long off times, resulting in apparent resistance and capacitance in series with the cathode. I do know that the 6080 was used in tube digial computers.

"...Long life, mechanically ruggedized ... Zirconium coated graphite anodes that ... remain warp free during life and provide one of the best gas "gettering" means known. .. ceramic insulators, hard glass ... massive cathodes provide adequate mission current reserve ... gold plated molybdenum wires in rugged grid structure, tube mount supported from the bulb by flexible metal vibration snubbers. In many circuits, one 6336A has replaced two or three tube type 6080WA or 6AS7G regulator tubes. ... A thirty second warm up time is recommended before plate voltage is applied..."

Keep em Glowing!
Roy, K1LKY since 1959

- -- Roy Morgan/Building 820, Room 562/Gaithersburg MD 20899 National Institute of Standards and Technology 301-975-3254 Fax: 301-948-6213 morgan@speckle.ncsl.nist.gov --

Date: Fri, 19 Dec 1997 16:04:33 -0500 (EST)

From: lee1@digital.net Subject: wtb 2meter rig Hi Gang and Merry christmass to all

Boy I finally found an advantage of being old, your family can not think of anything you need for xmas so they tell you they will send money.

With money you can buy a nice 2meter fm rig and that is just what I am looking for.

Something I can put in my car or with a 12v. supply use as a base station at home.

Nothing big or fancy and dont need a lot of power just want to be able to get out locally with a half way decent ant. So if any of you have a rig you want to sell let me know, if it is a ba more the better as long as you can supply the schematic or book that came with it.

If it is not a ba well so be, it am still interested.

Thank the good LORD for all that you have!!!

67yr old semi disabled senior trying to get code speed to 13wpm (stroke got my eyesight, balance & coordination) SO ONLY BA'S NO SOLID STATE

Leon (lee) Wiltsey 4600 Lake Haven blvd Sebring fl. 33872 KF4RCL TECK+

Date: Mon, 22 Dec 1997 05:01:52 -0700 (MST)

From: Jack Meadows <jackmead@getnet.com>
Subject: 813 xtal osc. (update)

Hi gang,

Last night I soldered in the last component and ran the smoke test. No smoke and 100 watts output with a 3.579 whimpy crystal! Ok, now the fun begins...a tweak here, a tweak there...shape the keying, ect.

The only problem so far is that it doesn't want to turn off sometimes after its keyed. I'm using screen grid keying...maybe need to apply some negative bias to turn it off. It really wants to oscillate.

Need to optimize the pi network values some. Also, going to play with bending the xtal freq (VXO).

I have small lamps for plate current, grid current and xtal current. It is fun to tune for max output for the minimum crystal current. This is a real glowbuggers delight...fiddely.

I'll have it on the $3.579~\mathrm{Mhz}$ glowbug/boatanchors hangout, if all goes well.

So, how are your Hartley, push pull tx, xtal osc. projects going? I sure enjoy hearing about them.

Best regards, Jack W7QQQ End of glowbugs V1 #209 *********